CLAIMS

1. Method of keying, in a space presenting two spatial dimensions and one temporal dimension, a signal S measured in positions U subject to an uncertainty, from a set of N signals measured in determined positions, the N +1 signals having their temporal origin in a same plane, the said method involving: - re-sampling the N + 1 signals in order to place them all in an identical sampling range,

- filtering the signal S in order to place it in a range of frequencies that is identical to that of the N signals,

and wherein the method also involves:

- defining for each position U associated with the measurements of the signal S a same neighbourhood of places V in the spatio-temporal space centred on the position U,

- producing a layered neural network RNv for each location V in the neighbourhood of U, each network having an entry vector of dimension N associated with the measurements of the N signals and a scalar exit associated with a measurement of the signal S,

- for each neural network RNv, defining a learning set such that the entries are the collection of all the vectors of measurements of the N signals situated at the locations V and the exits are the collection of the values of the signal S at the positions U for all the positions U,

- fixing a predetermined number of iterations Nit for all the neural networks and launching the learning phases of all the networks,

- for each neural network RNv, calculating the value of the integral l:v of the function giving the error committed by the network at each iteration, from iteration 1 to iteration Nit.

- for each surface spatial position Vk of the neighbourhood with coordinates (Xk,Yk,tO), selecting in the time dimension the pair of locations V1k(Xk,Yk,t1), V2k(Xk,Yk,h), of the neighbourhood which correspond to the two smallest local minima of the two integrals (LV\. LV2k),

- for each surface spatial position Vk of the neighbourhood, retaining from among the two positions Vh(Xk.Yk,t1), V2k(Xk,Yk,h) the position Vm, for which the signal estimated by the respective neural networks RNV\ and RNv2k presents a maximum variance,

- choosing from among the positions Vm the position Veal for which the integral tV m is minimum.

2. Method according to claim 1, wherein the use of the neural networks comprises:
- defining for each position U associated with the measurements of the signal S a same neighbourhood of places V in the spatia-temporal space centred on the position U,

- producing a layered neural network RNv for each location V in the neighbourhood of U. each network having an entry vector of dimension N x M associated with the measurements on a time window of size M centred on V of the N signals and a scalar exit associated with a value of the signal S,

- for each neural network, defining a learning set such that the entries are the collection of all the vectors of measurements taken in a time window of size M centred on V for the N signals and the exits are the collection of the values of the signal S at the positions U for all the positions U,

- fixing a predetermined number of iterations Nit for all the neural networks and launching the learning phases of all the networks,

- for each neural network RNv, calculating the value of the integral !,V of the function giving the error committed by the network at each iteration, from iteration 1 to iteration Nit,

- for each surface spatial position Vk of the neighbourhood with coordinates (Xk,Yk.tO), selecting in the time dimension the pair of locations V1k(Xk,Yk,t1), V2k(Xk,Yk,t2), of the neighbourhood which correspond to the two smallest local minima of the two integrals (Iv1k, :EV2k).

- for each surface spatial position Vk of the neighbourhood, retaining from among the two positions V1k(Xk,Yk,t1). V2k(Xk,Yk,t2) the position Vm, for which the signal estimated by the respective neural networks RNV\ and RNv2k presents a maximum variance,

- choosing from among the Vm positions the position Veal for which the integral Lvrn is minimum.